IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate and estimates for the next 5 years, if available, and comments. These tasks, when accomplished, will lead to recovery of bull trout in the coterminous United States as discussed in Part II of this recovery plan.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given and does not require that party to participate or expend any funds. However, willing participants will benefit by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan, therefore part of a coordinated recovery effort to recover bull trout. In addition, section 7 (a)(1) of the Endangered Species Act directs all Federal agencies to use their authorities to further the purposes of the Act by implementing programs for the conservation of threatened or endangered species.

Following are definitions to column headings and keys to abbreviations and acronyms used in the Implementation Schedule:

<u>Priority No.</u>: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population/habitat quality or some other significant negative impact short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

<u>Task No. & Task Description</u>: Recovery tasks as numbered in the recovery outline. Refer to the Narrative for task descriptions.

<u>Task Duration</u>: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task; when tasks are so combined, the time needed for task completion can be reduced.

<u>Responsible or Participating Party</u>: The following organizations are those with responsibility or capability to fund, authorize, or carry out the corresponding recovery task.

Canadian Government:

BCMWLAP British Columbia Ministry of Water, Land, and Air Protection

Federal Agencies:

BPA	Bonneville Power Authority
COE	U.S. Army Corps of Engineers
EPA	Environmental Protection Agency
FERC	Federal Energy Regulatory Commission
FHA	Federal Highway Administration
NMFS	National Marine Fisheries Service
NRCS	Natural Resources Conservation Service
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service

State Agencies:

IBODS	Idaho Board of Disaster Service
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDWB	Idaho Water Resources Board
IDWR	Idaho Department of Water Resources

ITD Idaho Transportation Department IWAG Idaho Watershed Advisory Group

MBTRT Montana Bull Trout Restoration Team
MBTSG Montana Bull Trout Scientific Group

MDEQ Montana Department of Environmental Quality

MDNRC Montana Department of Natural Resources and Conservation

MDOT Montana Department of Transportation

MFWP Montana Fish, Wildlife and Parks

Others:

Counties

KTOI Kootenai Tribe of Idaho

PCTC Plum Creek Timber Company

TU Trout Unlimited

An asterisk (*) indicates agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility.

<u>Cost Estimates</u>: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task, are itemized annually for the next 5 years, and include estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals. Cost estimates are not provided for tasks which are normal agency responsibilities under existing authorities.

Chapter 4 - Kootenai

	Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments			
number	number		duration (years)	(Alphabetical) Total USFS, Counties, IDEQ,	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5				
1	1.1.1	Reduce general sediment sources	25	USFS, Counties, IDEQ, IDFG, IDL, ITD, IDWAG, KTOI, MDNRC, MDOT, MFWP, NRCS, PCTC, FHA, USFWS							Ongoing ³ Ongoing administrative costs			
1	1.1.4	Support habitat protection and monitoring in British Columbia	25	BCMWLAP, BPA, IDFG, IDWAG, KTOI, MFWP, USFS, USFWS	1,250	50	50	50	50	50	Ongoing			
1	1.1.7	Monitor Wigwam River timber harvest	25	BCMWLAP, MFWP, USFS, Counties, USFWS	1,250	50	50	50	50	50	Ongoing			

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Ongoing tasks are currently being implemented as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically being done to address bull trout conservation, they are not included in cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

		Implen	nentation Sch	nedule for the Bull Trout Reco	very Plan: K	ootenai F	River Rec	covery U	nit		
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.2.1	Eliminate entrainment in diversions	25	IDFG, IDWR, MDNRC, MFWP, NRCS, USFWS	1,250	50	50	50	50	50	Ongoing
1	1.2.2	Provide fish passage around diversions	25	IDFG, IDWR, MDNRC, MFWP, NRCS, USFWS	1,250	50	50	50	50	50	Ongoing
1	1.2.3	Eliminate culvert barriers	25	USFS, Counties, IDFG, IDL, ITD, MDNRC, MDOT, PCTC, FHA	1,250	50	50	50	50	50	Ongoing
1	1.2.4	Improve instream flows	25	IWRB, MDNRC, MFWP, IDFG, KTOI,	Ongoing						Ongoing
1	1.3.6	Minimize potential stream channel degradation	25	Counties, IBODS, MDNRC, COE, IDFG, IDWAG, IDWR, ITD, KTOI, MDEQ, MDOT, MFWP	Ongoing						Ongoing management and administrative costs

	Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments			
number	number		duration (years)	(1	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5				
1	1.4.1	Protect Lake Koocanusa habitat	25	BPA, COE, MFWP, USFWS, Counties, EPA, MDEQ	Ongoing						Ongoing management costs			
1	1.4.2	Optimize outflow patterns from Libby Dam	25	BPA, COE, IDFG, MFWP, USFWS, Counties, EPA, IDEQ, KTOI, MDEQ, NMFS	Ongoing						Ongoing through section 7 consultation			
1	1.4.3	Provide flushing flows	25	BPA, COE, IDFG, MFWP, USFWS, Counties, EPA, IDEQ, KTOI, MDEQ, NMFS	Ongoing						Ongoing through section 7 consultation			
1	1.4.5	Examine bull trout loss of connectivity at Libby Dam	25	BPA, COE, MFWP, USFWS	1,250	50	50	50	50	50	Ongoing			
1	3.2.5	Coordinate with British Columbia	25	BCMWLAP, IDFG, MFWP, USFWS	250	10	10	10	10	10	Ongoing			

		Implen	nentation Sch	nedule for the Bull Trout Reco	very Plan: Ko	ootenai R	River Rec	overy U	nit		
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments
number	number	·	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	3.3.1	Evaluate site- specific conflicts with introduced sport fish	10	BCMWLAP, IDFG, MFWP, USFWS	1,000	100	100	100	100	100	Ongoing
1	4.2.1	Maintain connectivity with British Columbia	25	BCMWLAP, IDFG, MFWP, USFWS, IDWAG, KTOI, USFS	250	10	10	10	10	10	Ongoing
1	5.2.4	Evaluate habitat limiting factors for Bull and Sophie Lake core areas	10	MFWP, USFWS	100	10	10	10	10	10	
1	5.5.3	Research populations in Bull and Sophie lakes	10	MFWP, USFWS	Ongoing						Related to task 5.2.4
1	6.1.2	Protect habitat	25	IDFG, MFWP, USFWS, BPA, IDWAG, KTOI, NRCS, PCTC, USFS	Ongoing						Ongoing

	Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties	Cost estimates (\$1,000)						Comments			
number	(years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5						
1	6.2.1	Monitor compliance with the Biological Opinion on the Federal Columbia River Power System	25	USFWS, BPA, COE, IDEQ, IDFG, MDEQ, MFWP, USFS,	Ongoing						Ongoing agency and administrative costs			
1	6.2.3	Coordinate all recovery actions with appropriate British Columbia partners.	25	BCMWLAP, IDFG, MFWP, USFWS, BPA, COE, IDEQ, MDEQ, USFS,	1,250	50	50	50	50	50	Ongoing			
1	6.2.4	Ensure coordination of ESA recovery implementation	25	NMFS, USFWS, BPA, COE, FERC, NRCS, USFS	Ongoing						Ongoing agency and administrative costs			
1	6.3.1	Fully implement State habitat protection laws	25	IDL, MDNRC, IDEQ, IDWR, MFWP	Ongoing						Ongoing administrative and monitoring costs			

	Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties	Cost estimates (\$1,000)					Comments				
number	number		duration (years)	(years)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5				
2	1.1.2	Upgrade problem roads	25	USFS, Counties, IDL, ITD, MDOT, PCTC	Ongoing						Ongoing administrative and planning costs			
2	1.1.3	Clean up mine waste	25	MDEQ, IDEQ, EPA, IDL, IDWAG, MDNRC	Ongoing						Ongoing administrative costs			
2	1.1.5	Restore Boundary Creek	5	USFS, Counties	250	50	50	50	50	50				
2	1.1.6	Conduct Fisher River assessment	10	MFWP, PCTC, USFS, MDNRC	Ongoing						Ongoing management and administrative costs			
2	1.1.8	Assess/minimize threats from Skookumchuck pulp mill landfill closure	10	BCMWLAP, EPA, USFWS	250	25	25	25	25	25	Ongoing			

Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments		
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5			
2	1.3.1	Conduct watershed problem assessments	10	IDFG, MFWP, BPA, KTOI, NRCS, USFWS	Ongoing						Ongoing management and administrative costs		
2	1.3.2	Revegetate denuded riparian areas	25	USFS, IDFG, IDL, KTOI, MFWP, NRCS, PCTC, USFWS	250	10	10	10	10	10	Ongoing		
2	1.3.3	Improve grazing practices	25	USFS, KTOI, MDNRC, NRCS, PCTC	Ongoing						Ongoing administrative and planning costs		
2	1.3.4	Restore stream channels	25	USFS, IDFG, KTOI, MFWP, NRCS, PCTC, USFWS	Ongoing						See related task 1.3.1		
2	1.3.5	Improve instream habitat	25	USFS, IDFG, IDL, KTOI, MDNRC, MFWP, NRCS	Ongoing						See related task 1.3.1		
2	1.4.4	Avoid gas supersaturation	10	COE, BPA, EPA	Ongoing						Ongoing administrative and operational costs		

		Implem	nentation Sch	nedule for the Bull Trout Reco	overy Plan: K	ootenai F	River Rec	covery U	nit		
Priority	Task	Task description	Task	Cost estimates (\$1,000) Responsible parties						Comments	
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.4.6	Monitor kokanee entrainment through Libby Dam	25	BPA, COE, MFWP, IDFG	Ongoing						Ongoing administrative and operational costs
2	1.5.1	Monitor and mitigate fire effects, where necessary	25	IDL, MDNRC, USFS	Ongoing						Ongoing administrative and planning costs
2	2.1.1	Upgrade fish hatchery practices	25	BCMWLAP, IDFG, KTOI, MFWP, USFWS	Ongoing						Ongoing fishery management costs
2	2.1.2	Prevent introductions of nonnative fishes from private fish ponds	25	IDFG, MFWP, BCMWLAP	Ongoing						Ongoing fishery management costs
2	2.3.1	Discourage unauthorized fish introductions	25	BCMWLAP, IDFG, MFWP, KTOI, MDNRC, TU, USFWS	Ongoing						Ongoing fishery management costs

		Implem	nentation Sch	nedule for the Bull Trout Reco	very Plan: K	ootenai F	River Rec	covery U	nit		
Priority	Task	Task description	Task	Responsible parties	Cost estimates (\$1,000)						Comments
number	number		duration (Alphabetical) (years) DEC MEWR ATOL	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5		
2	2.6.1	Experimentally remove established brook trout populations	25	IDFG, MFWP, KTOI, USFWS	1,250	50	50	50	50	50	Ongoing
2	3.2.1	Minimize unintentional bull trout mortality	25	BCMWLAP, IDFG, MFWP, IDEQ, IDL, IDWR, KTOI, MDNRC	Ongoing						Ongoing fishery management costs
2	3.2.2	Ensure compliance with angling regulations and oversee scientific research	25	BCMWLAP, IDFG, MFWP, KTOI, USFWS	Ongoing						Ongoing fishery management costs; see related tasks 3.2.1, 3.2.3, 3.4.1
2	3.2.3	Implement angler education efforts	25	IDFG, MFWP, BCMWLAP, KTOI, USFWS	Ongoing						Ongoing fishery management costs; see related tasks 3.2.1, 3.2.2, 3.4.1

Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit													
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments		
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5			
2	3.4.1	Evaluate opportunities for regulated bull trout fisheries	25	BCMWLAP, IDFG, MFWP, USFWS	Ongoing						Ongoing fishery management costs; see related tasks 3.2.1, 3.2.2, 3.2.3		
2	4.1.1	Conduct genetic inventory	10	IDFG, MFWP, USFWS, BCMWLAP, KTOI	Ongoing						Ongoing fishery management cost; see related task 4.1.2		
2	4.1.2	Maintain long-term viability	25	IDFG, MFWP, USFWS, BCMWLAP, KTOI	Ongoing						Ongoing fishery management cost; see related task 4.1.1		
2	5.2.1	Delineate important migratory habitat	10	IDFG, MFWP, BCMWLAP, KTOI, USFWS	1,000	100	100	100	100	100	Ongoing		
2	5.2.3	Evaluate temperature as a limiting factor	25	EPA, IDFG, MFWP, IDEQ, KTOI, MDEQ, USFWS	1,250	50	50	50	50	50	See related task 1.3.1		

Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	5.2.6	Identify suitable unoccupied habitat	5	IDFG, MFWP, USFWS	Ongoing						See related tasks 5.2.1, 5.2.3, 5.2.4
2	6.1.1	Support watershed group restoration efforts	25	IDFG, MFWP, USFS, USFWS, BCMWLAP, IDEQ, IDL, IDWAG, KTOI, MDNRC, NRCS, PCTC,	Ongoing						Ongoing administrative and CWA costs
2	6.2.2	Implement Plum Creek Habitat Conservation Plan	30	PCTC, USFWS	750	30	30	30	30	30	Ongoing - 30-yr. agreement
2	6.3.2	Encourage floodplain protection	25	Counties, IDEQ, IDFG, IDL, KTOI, MDEQ, MDNRC, MFWP, PCTC	Ongoing						Ongoing administrative and planning costs
3	3.2.4	Solicit information from commercial guides	10	IDFG, MFWP	Ongoing						Ongoing administrative and planning costs

Implementation Schedule for the Bull Trout Recovery Plan: Kootenai River Recovery Unit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)		Comments					
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	5.2.2	Research the link between system productivity and bull trout abundance	25	BCMWLAP, IDFG, KTOI, MFWP, USFWS	1,250	50	50	50	50	50	Ongoing
3	5.2.5	Assess restoration potential	10	IDFG, MFWP, BCMWLAP, NRCS, USFWS	Ongoing						See related tasks 1.3.1 and 1.3.4
3	5.5.1	Research historical distribution and abundance	5	IDFG, BCMWLAP, MFWP, USFWS	50	10	10	10	10	10	
3	5.5.2	Map spawning habitat	25	IDFG, MFWP							Ongoing fishery management costs; see related task 5.2.1